

WO 99/36755

PCT/GB99/00044

CLAIMS

1. A marking element for indicating whether a pre-defined temperature condition has been maintained comprising a first material capable of flowing above a predetermined temperature separated from a second absorbent material by a heat disruptable barrier layer, the first and second materials being such that when the barrier layer is punctured and the predetermined temperature is exceeded the first material flows in the second material to produce a detectable change wherein the heat disruptable barrier layer is comprised of a heat disruptable material associated with an element capable of being inductively heated by electromagnetic energy to effect disruption of said material.

2. A marking element as claimed in claim 1 comprising a lower layer which, together with the heat disruptable barrier layer, forms a reservoir for the first material, and an absorbent layer provided on the opposite side of the barrier layer to said reservoir.

3. A marking element as claimed in claim 1 or 2 wherein the absorbent layer is overlaid by a transparent film.

4. A marking element as claimed in any one of claims 1 to 3 wherein the heat disruptable material is a film.

5. A marking element as claimed in claim 4 wherein the heat disruptable material is a plastics film.

6. A marking element as claimed in any one of claims 1 to 5 wherein the inductively heatable element is provided on the heat disruptable material.

00500369.00404

WO 99/36755

PCT/GB99/00044

7. A marking element as claimed in any one of claims 1 to 6 wherein the inductively heatable element is provided by a conductive ink.
8. A marking element as claimed in claim 7 wherein the conductive ink is a metallic ink or a graphite loaded ink.
9. A marking element as claimed in any one of claims 1 to 6 wherein the inductively heatable element is provided by metal, carbon or an electrically conductive plastics or polymeric material.
10. A marking element as claimed in claim 9 wherein the inductively heatable element is of metal in the form of a film, sheet or foil.
11. A marking element as claimed in any one of claims 1 to 10 wherein the barrier layer is disruptable by radiofrequency energy.
12. A marking element as claimed in any one of claims 1 to 10 which is disruptable by microwave energy.
13. A method of activating a marking element as claimed in any one of claims 1 to 12, the method comprising subjecting the marking element to electromagnetic energy capable of inductively heating said inductive heatable element to effect disruption of the barrier layer.
14. A barrier material comprised of a heat disruptable material associated with an element capable of being inductively heated by electromagnetic energy to effect disruption of said material.
15. A barrier material as claimed in claims 13 which is as defined in any one of claims 1 to 12.

0950039109

WO 99/36755

PCT/CB99/00044

10

16. A method of disrupting a barrier material <sup>A</sup> as claimed in claim 14 or 15, the method comprising subjecting the barrier material to electromagnetic energy capable of inductively heating said element to effect disruption of the material.

add  
A1

T01260"05E00960